

## PROGRAM OVERVIEW

This 24.25 hour review and update in the areas of clinical immunology, microbiology, and infectious diseases is intended to improve knowledge about the pathogenesis and clinical manifestations of infectious diseases, immunological mechanisms of disease and disease prevention, appropriate approaches to the diagnosis of infections and immunologic disorders, and utilization of the clinical microbiology and immunology laboratory including test selection and interpretation of results.

This course will provide a forum for the exchange of ideas dealing with microbial infections as well as immunity to infectious diseases and immunologic disorders. Faculty consists of clinicians involved in patient care, pathologists, and clinical laboratory scientists. Discussion of timely topics by faculty and participants assures that this course will be informative, interesting, and relevant.

On completion of the course, attendees should be able to:

- Identify new emerging pathogens, infectious syndromes, and immunologic diseases including clinical presentations
- Critically analyze current practice and laboratory procedures in diagnosing infectious and immunologic disorders as well as result reporting
- Update the current knowledge of the epidemiology and mechanisms of transmission of infectious disorders and the use of serologic testing in such studies
- Assess new therapeutic modalities, which are being developed or utilized in treating infectious and immunologic diseases
- Discuss genetics and molecular diagnosis of infections and immunologic disorders.

## WHO SHOULD ATTEND

The following should consider attending: pathologists, clinical pathologists, laboratory scientists, pediatric and family medicine clinicians, infectious disease specialists, clinical immunologists and allergists, microbiologists, residents, and postdoctoral fellows. Medical technologists, laboratory managers, nurse practitioners, hospital epidemiologists, research and development technologists, and pharmaceutical and diagnostic industry personnel will also find the course of great value (suggested background: professional degree or medical technologist degree in pathology, microbiology, immunology, or infectious diseases).

## SETTING

Jackson, Wyoming is located 20 miles from Grand Teton National Park and 50 miles from Yellowstone National Park. It is set among spectacular mountains, forests, and rivers, and offers excellent recreational opportunities, including hiking, horseback riding, rafting, canoeing, kayaking, climbing, golfing, sight-seeing, wild animal viewing, trout fishing, and mountain and road biking, as well as unique dining facilities and numerous shops, boutiques, and art galleries.

## REGISTRATION

Please fill out and return the coupon with your registration fee. Advanced registration is encouraged for planning and housing purposes. Registration is considered incomplete until full tuition is received.

The regular fee is \$775; the reduced fee (for medical technicians, residents, trainees, and fellows) is \$550. The registration fee include continental breakfasts, Mexican fiesta, course syllabus and materials, and a \$100 nonrefundable administrative fee.

## LODGING, TRANSPORTATION, AND CONFIRMATION

Upon receipt of registration and payment, a confirmation letter with information on transportation, lodging, and in-person registration will be sent to you. Please allow 7–14 days for receipt.

The meeting will be held at the Snow King Resort. Rooms will be held until May 28; following that day, lodging will be confirmed on an availability basis. Room rates are \$200 single/double. Contact the Snow King at (800) 522-KING and state that you are with the 2015 Immunology, Microbiology, and Infectious Diseases course.

Participants who plan to rent cars are encouraged to make advance reservations. Major airlines provide service directly to the Jackson Hole Airport. The Snow King Resort has shuttle service from the airport to and from the hotel. The town is within easy walking distance of the hotel. Tours of Grand Teton and Yellowstone can be arranged.

## ACCREDITATION AND CREDIT STATEMENTS

### ACCREDITATION

 The University of Utah School of Medicine is accredited by the Accreditation Council for Continuing Medical Education to provide continuing medical education for physicians.

### AMA CREDIT

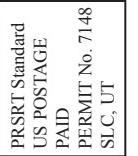
The University of Utah School of Medicine designates this live activity for a maximum of 24.25 AMA PRA Category 1 Credit(s)\*. Physicians should claim only the credit commensurate with the extent of their participation in the activity.

### ASCLS CREDIT

The program has been approved for 24.25 contact hours through ARUP, which is approved as a provider of continuing education programs in the clinical laboratory sciences by the American Society for Clinical Laboratory Sciences (ASCLS) P.A.C.E.® Program.

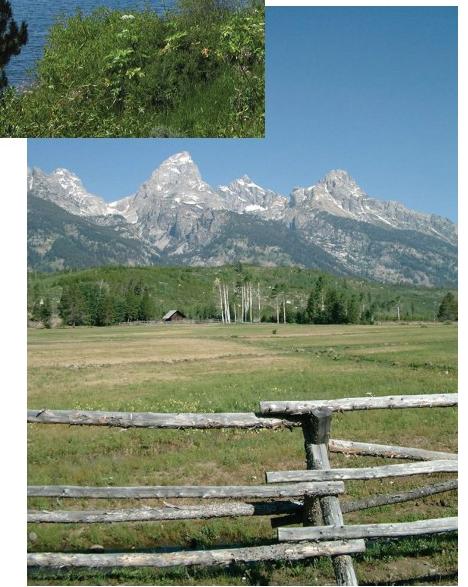
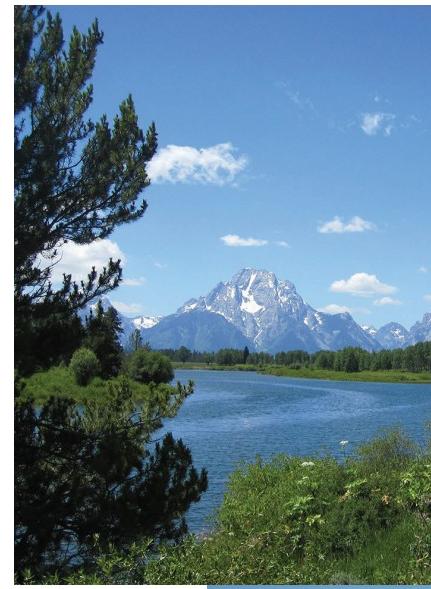
## NONDISCRIMINATION AND DISABILITY ACCOMMODATION STATEMENT

The University of Utah does not exclude, deny benefits to or otherwise discriminate against any person on the basis of race, color, national origin, sex, disability, age, veteran's status, religion, gender identity/expression, genetic information, or sexual orientation in admission to or participation in its programs and activities. Reasonable accommodations will be provided to qualified individuals with disabilities upon request, with reasonable notice. Requests for accommodations or inquiries or complaints about University nondiscrimination and disability/access policies may be directed to the Director, OEO/AA, Title IX/Section, 504/ADA Coordinator, 201 S. President's Circle, RM 135, Salt Lake City, UT 84112, (801) 581-8365 (Voice/TTY), (801) 585-5746 (Fax).



DIVISION OF CLINICAL PATHOLOGY  
University of Utah School of Medicine  
30 North 1900 East, Room 5B-114  
Salt Lake City, UT 84132-2501

The 32nd Annual  
**SUMMER UPDATE**  
CLINICAL IMMUNOLOGY, MICROBIOLOGY, AND INFECTIOUS DISEASES



Harry R. Hill, MD

**JULY 13–17, 2015**

**SNOW KING RESORT | JACKSON, WYOMING**

Sponsored by



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A NONPROFIT ENTERPRISE OF THE UNIVERSITY OF UTAH AND ITS DEPARTMENT OF PATHOLOGY

## PROGRAM AGENDA

SUNDAY, JULY 12, 2015

6:00–7:00 p.m. In-person registration

### DAILY SCHEDULE

MONDAY, JULY 13–FRIDAY, JULY 17, 2014

7:00 a.m. Continental breakfast

7:30 a.m.–12:00 p.m. Subject presentations

12:00–1:00 p.m. Question and answer panel discussions

MONDAY, JULY 13, 2014

### DINNER AND PRESENTATION

6:30–9:00 p.m. Get-acquainted Mexican fiesta

## SPECIAL TOPICS

- Nature's Own Experiments
- Staph versus the Neut
- Neglected Tropical Infectious Diseases in Latin America: Social Inequities of our Times
- Challenges in the Global Elimination of Measles: Still Measles after all these Years.
- Idiopathic T Cell Deficiency
- An ID Clinician's Experience with CVID
- Autoimmune Inflammatory Bowel Disease
- Gastrointestinal Complications of Hypogammaglobulinemia
- Mass Spec in Clinical Microbiology
- Acid Fast Bacterial Laboratory
- Molecular Diagnosis of GI Pathogens
- New and Evolving Issues in Infectious Disease Serology
- Update: Lab Diagnosis of Sepsis and Meningitis
- Group A Streptococci
- Update in Fungal Diagnostics
- Viral Load Monitoring in Transplantation
- Bear Bites and Other Teton Hazards
- Innate Immune Abnormalities
- What to do about Lower Immunoglobulins
- Respiratory Viruses
- The Humane Microbiome in Health and Disease
- Next Generation Sequencing-Based Gene Tests for Immunodeficiencies
- Update on Novel Genetic Immunodeficiencies
- Head and Neck Infections
- Case Studies
- Clinical Update on Hepatitis C Infections
- Affordable Care Act: Unconstitutional?
- Patient Ignorance versus Science in Disease
- Alzheimer Disease and Potential New Markers for Early Detection
- Toll Receptor 3 Analysis and HSV Meningitis

## PRESENTERS

### Course Directors

Harry R. Hill, MD

Larry G. Reimer, MD

Judy A. Daly, PhD

### Special Guests

Marquam R. Oliver, MD

Adjunct Associate Professor of Medicine, University of Utah

Infectious Disease Specialist, Internal Medicine Associates; St. Mark's Hospital

Idiopathic T Cell Deficiency

An ID Clinician's Experience with CVID

Paul G. Quie, MD

Regent's Professor Emeritus of Pediatrics; Co-Director, International Medical Education and Research Program; Former President, Infectious Diseases Society of America; University of Minnesota Medical School, Minneapolis, Minnesota

Nature's Own Experiments

Staph versus the Neut

Jose I. Santos, MD

Professor of Experimental Medicine, School of Medicine; National Autonomous University of Mexico; Director General; Quality Patient Safety and Health Manpower Development; Mexican Ministry of Health; Mexico City, Mexico

Neglected Tropical Infectious Diseases in Latin America: Social Inequities of our Times

Epidemiology of Viral Respiratory Infections in Mexico

John Valentine, MD

University of Utah HSC

Gastroenterology, Hepatology, and Nutrition; University of Utah

Autoimmune Inflammatory Bowel Disease

Gastrointestinal Complications of Hypogammaglobulinemia

### University of Utah School of Medicine, ARUP Laboratories

Adam Barker, PhD

Assistant Professor of Pathology, University of Utah School of Medicine  
Medical Director, Microbiology Laboratory and R&D Special Operations; ARUP Laboratories

Mass Spec in Clinical Microbiology

Acid Fast Bacterial Laboratory

Marc R. Couturier, PhD, D(ABMM)

Assistant Professor of Pathology, University of Utah School of Medicine  
Medical Director, Parasitology/Fecal Testing, Infectious Diseases, Rapid Testing and Molecular Immunology; ARUP Laboratories

Molecular Diagnosis of GI Pathogens

New and Evolving Issues in Infectious Disease Serology

Judy A. Daly, PhD

Professor of Pathology, University of Utah School of Medicine

Director, Microbiology Laboratories, Primary Children's Medical Center

Update: Lab Diagnosis of Sepsis and Clostridium difficile Meningitis

Group A Streptococci

Kimberly E. Hanson, MD, MHS

Associate Professor of Medicine and Pathology, University of Utah School of Medicine

Head, Immunocompromised Host Infectious Diseases Services

Medical Director, Clinical Microbiology; ARUP Laboratories

Update in Fungal Diagnostics

Viral Load Monitoring in Transplantation

### Harry R. Hill, MD

Professor of Pathology, Pediatrics, and Medicine; Head, Clinical Immunology/Immunodeficiencies; University of Utah School of Medicine

Medical Director, Cellular and Innate Immunology; ARUP Laboratories

Bear Bites and Other Teton Hazards

Innate Immune Abnormalities

What to do about Lowered Immunoglobulins

### David R. Hillyard, MD

Professor of Pathology and Biology, University of Utah School of Medicine  
Medical Director, Molecular Infectious Diseases Testing; ARUP Laboratories

Respiratory Viruses

The Humane Microbiome in Health and Disease

### Attila Kumánovics, MD

Assistant Professor of Department of Pathology, University of Utah School of Medicine  
Assistant Medical Director, Immunology Laboratory, Co-Director, Immunogenetics Laboratory; ARUP Laboratories

Next Generation Sequencing-Based Gene Tests for Immunodeficiencies

Update on Novel Genetic Immunodeficiencies

### Larry G. Reimer, MD

Professor of Pathology and Medicine, University of Utah School of Medicine  
Medical Director, Clinical Microbiology Laboratories and Infectious Diseases; Salt Lake Veterans Administration Medical Center

Head and Neck Infections

Case Studies

Clinical Update on Hepatitis C Infections

### Patrick A. Shea

Private Practicing Attorney and Associate Research Professor of Biology, University of Utah

Affordable Care Act: Unconstitutional?

Patient Ignorance versus Science in Disease

### Thomas B. Martins, MS

Senior Scientist, ARUP Institute for Clinical Research; ARUP Laboratories

Alzheimer's Disease and Potential New Markers for Early Detection

Toll Receptor 3 Analysis and HSV Meningitis

## ENROLL NOW!

### 32ND ANNUAL SUMMER UPDATE

Clinical Immunology, Microbiology, and Infectious Diseases

JULY 13–17, 2015

SNOW KING RESORT, JACKSON, WYOMING

Advance registration is required.

To register and for more information, please visit [www.arup.utah.edu/summerupdate](http://www.arup.utah.edu/summerupdate), or fill out and mail or fax the following form. Advanced registration is required.

Full Name \_\_\_\_\_

Degree \_\_\_\_\_

Specialty \_\_\_\_\_

Title/Affiliation \_\_\_\_\_

Address \_\_\_\_\_

City \_\_\_\_\_

State \_\_\_\_\_

Zip \_\_\_\_\_

Phone \_\_\_\_\_

Fax \_\_\_\_\_

Email \_\_\_\_\_

### Tuition fees:

- \$775—full week
- \$200—one day
- \$400—two days
- \$600—three days
- \$550—full week, reduced enrollment fee (medical technologists, residents, fellows, and trainees)

The registration fee includes daily continental breakfast, get-acquainted Mexican fiesta, course syllabus and materials, and a \$100 nonrefundable administrative fee. Cancellation notice may be given by calling (801) 581-5873 and must be followed by a written request for cancellation. Please allow three weeks for refund processing.

To pay via credit card, please visit [www.arup.utah.edu/summer update](http://www.arup.utah.edu/summer update).

### Make checks payable to:

Microbiology/Immunology Course Education

### Mail to:

Jeannette Rejali

Clinical Immunology/Immunodeficiencies

University of Utah School of Medicine

30 North 1900 East, Room 5B-114

Salt Lake City, UT 84132-2501

Registration form may also be sent via fax to: (801) 585-1265.

For hotel reservations, call the Snow King Resort at (800) 522-KING. Please specify that you are with the 2015 Immunology, Microbiology, and Infectious Diseases course.

## FOR MORE INFORMATION

Jeannette Rejali, Course Coordinator

phone: (801) 581-5873 fax: (801) 585-1265

website: [www.arup.utah.edu/summerupdate](http://www.arup.utah.edu/summerupdate)